

## **WHAT IS CLAIMED IS:**

1. A curable composition comprising:
  - (a) a urethane acrylate oligomer;
  - (b) a reactive plasticizer or reactive diluent; and
  - (c) a cure system,wherein said composition when cured produces a Shore A hardness of about 55 or less.
2. The curable composition of claim 1, wherein said urethane acrylate oligomer comprises about 25% to about 55% by weight di-functional monomer.
3. The curable composition of claim 1, wherein said urethane acrylate oligomer comprises about 30% to about 47% by weight di-functional monomer.
4. The curable composition of claim 1, wherein said urethane acrylate oligomer comprises about 15% to about 65% by weight mono-functional monomer.
5. The curable composition of claim 1, wherein said urethane acrylate oligomer comprises about 10% to about 30% by weight mono-functional monomer.
6. The urethane acrylate of claim 1, wherein said reactive plasticizer or reactive diluent comprises a mono-functional (meth)acrylate.
7. The curable composition of claim 1, wherein said urethane acrylate oligomer comprises a polyester based aliphatic urethane-acrylate.
8. The curable composition of claim 1, wherein said reactive plasticizer or reactive diluent is present in amounts of about 0.5 to about 45% by weight of said curable composition.
9. The curable composition of claim 8, wherein said reactive plasticizer or reactive diluent is present in amounts of about 28% to about 45% by weight of said curable composition.

10. The curable composition of claim 1, wherein said reactive plasticizer or reactive diluent is selected from the group consisting of 2(2-ethoxyethoxy)-ethyl acrylate, isobornyl acrylate and combinations thereof.
11. The curable composition of claim 1, wherein said cure system comprises a photoinitiator.
12. The curable composition of claim 11, wherein said photoinitiator is present in amounts of about 1% to about 10% by weight of the curable composition.
13. The curable composition of claim 11, wherein said photoinitiator is present in amounts of about 4% to about 7% by weight of the curable composition.
14. The curable composition of claim 1, further comprising a pigment selected from the group consisting of organic and inorganic pigments, dyes and combinations thereof.
15. The curable composition of claim 14, wherein said pigment composition is plasticized in a carrier.
16. A curable composition comprising:
  - (a) a di-functional urethane acrylate oligomer, wherein said oligomer comprises about 35% to about 43% by weight;
  - (b) a mono-functional urethane acrylate, wherein said mono-functional urethane acrylate is present in amounts of about 15% by weight;
  - (c) a reactive plasticizer or reactive diluent, wherein said plasticizer or diluent is present in amounts of about 35% to about 43% by weight; and
  - (d) a photoinitiator, wherein said photoinitiator is present in amounts of about 5% by weight.
17. The curable composition of claim 16, wherein said reactive plasticizer or reactive diluent comprises about 5% to about 10% by weight 2(2-ethoxyethoxy)-ethyl acrylate.

18. A composition comprising the reaction product of:
- (a) a urethane acrylate oligomer; and
  - (b) a reactive plasticizer
- wherein said reaction product produces a Shore A hardness of about 55 or less.
19. A method of making a soft tip hearing aid component comprising the steps of:
- (a) combining a curable composition comprising:
    - (i) a urethane acrylate oligomer;
    - (ii) a reactive plasticizer or reactive diluent;
    - (iii) a cure system;
  - (b) pouring said curable composition into a mold cavity of a mold; and
  - (c) exposing said curable composition to photo-radiation for a time and intensity sufficient to fully cure said composition to produce Shore A hardness of about 55 or less.
20. The method of claim 19, further comprising the steps of adding on top of said component a layer of uncured monomeric material and curing said monomeric material to a desired thickness.
21. The method of claim 20, wherein said monomer material forms a hearing aid housing when cured.
22. The method of claim 21, wherein curing said monomeric material on top of said component includes adhering to one another.
23. An ear-worn hearing aid component comprising the reaction product of:
- (a) a urethane acrylate oligomer; and
  - (b) a reactive plasticizer or reactive diluent,
- wherein said composition when cured produces a Shore A hardness of about 55 or less.

24. A hearing aid assembly comprising:

(a) amplifier means for receiving and amplifying unamplified sound;

(b) a tube adapted for conveying amplified sound from said amplifier means to a first end of said tube inside the ear canal;

(c) a tip enclosing said tube comprising the reaction product of:

(i) a urethane acrylate oligomer; and

(ii) a reactive plasticizer or reactive diluent,

wherein said soft tip exhibits a Shore A hardness of about 55 or less; and

(d) a housing comprising a cured monomeric material enclosing said amplifier means and mating to said soft tip.